

Claims

1. A method of authenticating a client device for inclusion in a wireless network including the steps of:

5 responsive to a user action at the client device and at one other device in the wireless network, determining a distance between the client device and the at least one other device in the wireless network; and authenticating the client device if the distance is within a preselected range of distances.

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2. The method of claim 1, wherein the user action includes the transmission of a signal to the client device.

3. The method of claim 2, wherein the transmission of a signal to the client device occurs in response to the depression of at least one button on the client device.

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4. The method of claim 1, wherein the transmission of a signal to the client device occurs in response to a radio transmission by the user in the proximity of the client device.

5. The method of claim 4, wherein the radio transmission by the user is performed using the at least one other device in the wireless network.

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6. The method of claim 4 wherein the at least one other device is a fob.

7. The method of claim 1, wherein the user action includes the disconnection of power from the client device.

8. The method of claim 1, wherein the step of determining the distance between the client device and the at least one other device includes the steps of waiting for a received a signal from the at least one other device.
9. The method of claim 1, wherein the client device is not authenticated if more than one signal is received during the step of waiting.
10. The method of claim 9, further including the step of measuring a strength of the signal received from the at least one other device and associating the strength of the signal with a measured distance.
11. The method of claim 9, further including the step of determining whether the measured distance is within the predetermined range of distances.
12. The method of claim 1, further including the step of identifying a master device in the wireless network.
13. The method of claim 1, further including the step of storing an identifier of the client device and the at least one other device in a table in the client device.
14. An apparatus for authenticating a client device in a wireless network including at least one other device:
- means for detecting a user action at the client device;
 - means for receiving, at the client device, a signal transmitted from the at least one other device in response to the user action;
 - means for determining a distance between the client device and the at least one other device; and
 - means for authenticating the client device and the at least one other device if the distance is within a preselected range of distances.

15. The apparatus of claim 14, wherein the means for determining a distance operates in response to a strength of the signal.

16. The apparatus of claim 14, wherein the means for authenticating further includes means for determining that only one signal is received by the client device in response to the user action.

17. A wireless device for use in a wireless network, comprising:
a memory for storing a table of identities of member devices of the wireless network, wherein the identify of each member device is only stored in the table after the member device is authenticated, and wherein each member device is only authenticated if its physical proximity to another member of the wireless network is within a preselected range during authentication of the respective member.

18. In a computer having a memory for storing computer readable program code thereon, a computer program for authenticating a client device for inclusion in a wireless network, the computer program including:

program code operating responsive to a user action at the client device and at one other device in the wireless network, for determining a distance between the client device and the at least one other device in the wireless network; and

program code for authenticating the client device if the distance is within a preselected range of distances.